

1 **DIRECT TESTIMONY OF**

2 **JOHN W. PRESTON, JR.**

3 **ON BEHALF OF**

4 **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

5 **DOCKET NO.**

6
7 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

8 A. My name is John W. Preston, Jr. and my business address is 6248 Bush River
9 Road, Columbia, South Carolina.

10 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

11 A. I am employed by SCANA Services, Inc. and am a Senior Engineer in the
12 Corporate Environmental Services Department and serve as Section Head of the
13 Generation Support Group.

14 **Q. WOULD YOU PLEASE SUMMARIZE YOUR EDUCATIONAL**
15 **BACKGROUND AND EXPERIENCE?**

16 A. I graduated from the University of South Carolina with a Bachelor of Science
17 degree in Chemical Engineering and a Master of Science degree in Engineering. I
18 hold a Professional Engineer's license to practice engineering in South Carolina.
19 I have worked in the environmental field for twenty-eight (28) years, twenty of
20 those with SCE&G. I am a research advisor to the Electric Power Research
21 Institute, the Chairman of the South Carolina Chamber of Commerce
22 Environmental Technical Committee, the President of the Carolinas Air Pollution
23 Control Association, a member of the Central Midlands Clean Cities Coalition
24 Planning Committee, a member of the Department of Health & Environmental

1 Control (DHEC) Clean Air Partnership, and a member of DHEC's Small Business
2 Assistance Compliance Advisory Panel.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. The purpose of my testimony is to discuss aspects of the Jasper County
5 Generating project, which relate to environmental matters. I will describe the
6 efforts to minimize the environmental impact of the project, the permitting
7 process, and the status of the acquisition of the required permits.

8 **Q. PLEASE DESCRIBE THE ENVIRONMENTAL MINIMIZATION**
9 **EFFORTS OF THE PROPOSED JASPER PROJECT.**

10 A. The first minimization effort is the use of natural gas as the primary fuel. The
11 sulfur and ash content of natural gas is negligible, thus, sulfur dioxide and
12 particulate emissions are at an absolute minimum. With the ash and sulfur
13 content being negligible, the need for large settling ponds or landfills to dispose of
14 the ash and scrubber sludge does not exist in this project. State of the art control
15 technology for nitrous oxide (NOx) emissions will be utilized at the Jasper
16 project. With the use of combustion controls and Selective Catalytic Reduction
17 equipment, the NOx emissions will be at an extremely low concentration of 3.5
18 parts per million (ppm). Combustion controls will also minimize the carbon
19 monoxide (CO) and volatile organic compound (VOC) emissions.

20 A complete application, including an air quality analysis, a secondary impacts
21 analysis, and a Class I Area impact review, have been submitted to DHEC's
22 Bureau of Air Quality. Review of this application will also be performed by the
23 United States Environmental Protection Agency and the Federal Land Manager of

1 the three Class I air quality areas within 200 kilometers (124 miles) of the Jasper
2 project.

3 A complete air quality analysis has been performed for the new combustion
4 turbines. Air quality impact determinations demonstrate that operation of this
5 facility in conjunction with other emission sources will be in full compliance with
6 the National Ambient Air Quality Standards (NAAQS). The air permit application
7 demonstrates that the proposed project will be in full compliance with applicable
8 state and federal air pollution control requirements based on #2 fuel oil firing.

9 A secondary impacts analysis and a Class I Area impact review were
10 conducted to evaluate potential impacts on soil, vegetation, visibility, and
11 potential associated economic growth. No areas of concern were identified.
12 Impacts to Class I Areas that exhibit pristine air quality are not anticipated from
13 this project, since the nearest Class I Areas are over 100 kilometers (62 miles)
14 from the Jasper project.

15 Water usage at the Jasper project will be such that no direct discharge of
16 process wastewater to waters of the United States will be necessary. No National
17 Pollutant Discharge Elimination System (NPDES) permit will be required, except
18 for a General NPDES permit for stormwater discharges during construction and
19 operation. SCE&G will purchase water from the Beaufort Jasper Water Authority
20 (BJWA). The project usage will be 8150 gallons per minute at peak flow rate and
21 5530 gallons per minute during normal usage. The major water usage will be for
22 cooling tower make-up. Water used for cooling will be recycled, evaporated, or
23 returned as blowdown to the BJWA. Sanitary wastes will be discharged to the

1 City of Hardeeville publicly owned treatment works (POTW). Other smaller
2 waste streams will be discharged to either the BJWA or Hardeeville POTW.
3 Temporary wells for water supply during construction will be necessary, however,
4 no groundwater withdrawals at the site will occur when operation of the facility
5 begins. All water supply needs will be provided by BJWA, including the
6 temporary wells during construction.

7 A wetland delineation has been performed at the Jasper site and all
8 construction and operation activities will avoid wetlands, thus, eliminating impact
9 to this ecosystem. The wetland delineation followed the United States Corp of
10 Engineers Wetland Delineation Manual, and based on this delineation, two
11 wetland systems were identified. These areas will be avoided.

12 An Endangered Species Assessment has been conducted, and according to the
13 field surveys, no state or federally listed threatened or endangered species were
14 observed within the project area.

15 An intensive cultural resource survey was conducted, and based on the results,
16 one previously unrecorded site and one isolated find were identified. These two
17 sites are not recommended as being eligible for the National Register of Historic
18 Places. The archaeologists have concluded that no further action is required with
19 regard to cultural resources.

20 **Q. IN YOUR OPINION, IS THE PROJECT'S IMPACT ON THE**
21 **ENVIRONMENT JUSTIFIED?**

22 A. Yes. Given our environmental minimization efforts, I believe the impact upon the
23 environment is justified.

1 **Q. DISCUSS BRIEFLY THE ENVIRONMENTAL PERMITTING PROCESS**
2 **AT THE JASPER SITE.**

3 A. In addition to the review process which is underway here before the Commission,
4 the Company must make application to and receive approval from other
5 regulatory agencies at the federal, state, and local levels. The construction and
6 operation of the facility and its environmental impact on all media (air, water, and
7 land) will be evaluated primarily by the South Carolina DHEC. An application
8 for a DHEC Bureau of Air Quality permit has been filed, and construction cannot
9 begin without the approval of the project through the issuance of the Air permit.
10 This permit application will also be reviewed by the United States Environmental
11 Protection Agency Region IV in Atlanta and by the Federal Land Managers
12 associated with the three Class I air quality areas within 200 kilometers of the
13 Jasper site.

14 The project will require construction permits for all on-site wastewater treatment
15 facilities (e.g. collection systems, pumps, sumps, etc.). Prior to performing any
16 construction on site, an approval for the Federal General Permit for stormwater
17 discharges associated with industrial activity must be obtained. SCDHEC
18 administers the General Permit program for these type discharges. In addition,
19 since Jasper County is a coastal county, there is a second stormwater permit that
20 has to be obtained to address activities during construction. In this permit there
21 are specific State requirements regarding properly managed stormwater flows and
22 sediment control practices that must be followed during construction.

23 Construction permit applications for wastewater treatment facilities and

1 applications for the stormwater permits will be submitted when design drawings
2 are available.

3 **Q. WHAT IS THE STATUS OF THE ACQUISITION OF EACH REQUIRED**
4 **PERMIT?**

5 A. The permit application for DHEC's Bureau of Air Quality permit was submitted
6 on August 7, 2001. The air permit is expected to be issued by May 2002.
7 The preliminary engineering report (PER) for the wastewater treatment facilities
8 will be submitted when design is complete and the stormwater permit
9 applications will be submitted in November 2001. Construction permits for the
10 wastewater treatment facilities are expected to be issued three months after the
11 application is submitted. The stormwater permits are expected to be issued in
12 February 2002.

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 A. Yes, it does.